

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) Source-antenna for transmitting/receiving electromagnetic waves comprising on a support an array of n independent radiating elements operating in a first frequency band and an element with longitudinal radiation operating in a second frequency band and situated at the center of the array, said longitudinal radiation element having an axis of radiation ~~coinciding with an axis of radiation of the electromagnetic waves~~ and each independent radiating element having a respective axis, the array of n radiating elements and the element with longitudinal radiation having a substantially common phase center, the n radiating elements being arranged symmetrically about the longitudinal-radiation element, wherein each radiating element of the array consists of a traveling wave antenna.

2. (Previously amended) Source-antenna according to Claim 1, characterized in that the traveling wave antenna is an helix.

3. (Previously amended) Source-antenna according to Claim 2, characterized in that the length of the helix is calculated in such a way that the radiation pattern of the array is substantially identical to the radiation pattern of the said helix.

4. (Previously amended) Source-antenna according to Claim 2, characterized in that the helixes are arranged so as to form a sequential-rotation array.

5. (Previously amended) Source-antenna according to Claim 1, characterized in that the array of n radiating elements is excited by a feed array made in printed technology.

6. (Original) Source-antenna according to Claim 1, characterized in that n is equal to 4.

7. (Original) Source-antenna according to Claim 1, characterized in that n is equal to 8.

8. (Previously amended) Source-antenna according to Claim 1, characterized in that the longitudinal-radiation element comprises a longitudinal-radiation dielectric rod.

9. (Previously amended) Source-antenna according to Claim 1, characterized in that the longitudinal-radiation element comprises an helix with axis coinciding.

10. (Original) Source-antenna according to Claim 7, characterized in that the longitudinal-radiation element is excited by means comprising a wave guide.

11. (Original) Source-antenna according to Claim 8, characterized in that the longitudinal-radiation element is excited by means comprising a wave guide.

12. (Original) Source-antenna according to Claims 1, characterized in that one of the two frequency bands is used for the reception of electromagnetic waves whilst the other frequency band is used for the transmission of electromagnetic waves.